Dear Commissioner:

I write to set forth my opinion that the Federal Communications Commission should not allow the implementation of the technology commonly known as BPL.

- 1. BPL will diminish the ability of Amateur Radio Operators to initiate and maintain communications circuits in the MF, HF, VHF and UHF spectra owing to the interference caused to these bands by fundamental and harmonic interferences. It is doubtful that reception of incoming signals could overcome interference caused by the rapid rise and fall times of the comparatively strong BPL signals proposed by its proponents.
- 2. BPL signals will generate spurious signals owing to the high probability of noon-linear, rectifying junctions and contacts within the power line network, with many of these spurious signals being nearly impossible to localize, due to the vast extent of the power line grids over which BPL would propagate.
- 3. BPL is not the sole means of carrying out digital communications. Indeed, there are many other modes including telecommunications, CATV, microwave up and down links, and satellite links the purpose of which BPL would only be duplicating. Thus, BPL is a redundant technology. Because it is redundant, the certain interference levels do not warrant its implementation.
- 4. The Amateur Radio Service would have its legally mandated role of serving the Public Interest severely curtailed and emergency communications and Military Affiliate Amateur Radio Station services extended to our Military and Naval Troops would be devastated. Moreover, the rich history of the Amateur Radio Service advancing the frontier of technology would become nonexistant. On this point alone, recall that the Amateur Radio Service was the first to experiment with and to develope Single Side Band operation modes to help conserve radio spectra. Moreover, the Service pioneered the use of HF baands below 200 meters when commercial interests and the Federal Government considered these to be useless for communications. I believe firmly that Amateur Radio will cease to function as intended by Law, and forsee that, if the implementation of BPL is allowed, the single most rich source of technological research which is not bound by Intellectual Property Rights will cease to exist. The Public Interest will not be served.
- 5. Governmental Radio Services such as the United States Coast Guard, the United States Coast Guard Auxilliary, the United States Air Force Civil Air Patrol and others will suffer the same interference from BPL as the Amateur Radio Service. The gravely serious missions of these organizations will be jeopardized, resulting in the loss of life and property because of the implementation of a redundant communications mode.
- 6. It is illegal for any entity, including the Federal Government, to allow interference to other radio services, as provided for in the United States Code. If BPL is permitted, the Law mandates that it protect extant services. It is highly unlikely

that power generation companies, power distribution companies, power transmission companies and their communications affiliates would protect existing services from interference they cause to the existing services. In fact, they will probably be reluctant to solve such problems in a timely manner in the few cases that they may decide to address.

- 7. Studies that have been submitted to the Commission overwhelmingly decry the deployment of BPL for the reasons I have stated above. Thus, objective engineering and scientific Evidence and Expert Testimony exist and have been provided to the Commission.
- 8. With the foregoing stated, it is apparent that the sole objective of BPL proponents and providers is to reap a measure of profitability through the implementation of the BPL technology in spite of the facts that BPL will indeed have deleterious effects on the extant radio services. Although I hold that all legal entities and persons have a Right to profit from any Legal enterprise, the impact of implementing BPL on the Public and other Radio Services would not ameliorate the injured Parties or justify BPL profits to its proponents.

Thus I pray that the Commission will act swiftly and decisively, and will dismiss the Petition made by and on the behalf of those with strictly pecuniary interests for the implementation of the technology commonly known as BPL.

Very truly yours,

Peter M. Capani BSEE, Master of Electrical Engineering Licensed Professional Engineer, State of Texas General Radiotelephone Certificate.....

....(First Class Commercial Radiotelephone License 1969)
AC5MF Amateur Extra Class (Formerly WN2ZHI, WB2ZHI, WB5YDI, WA2RFO)

Past United States Coast Guard Auxilliary Flotilla Commander Former Captain, USAF Civil Air Patrol